



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,894	01/26/2001	Ronald Dean Parrish	BLD920000045US1	7753

24033 7590 10/01/2004

KONRAD RAYNES & VICTOR, LLP  
315 S. BEVERLY DRIVE  
# 210  
BEVERLY HILLS, CA 90212

EXAMINER

PHAM, THIERRY L

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/770,894

Applicant(s)

PARRISH ET AL.

Examiner

Thierry L Pham

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9, 17-19 and 27-29 is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-16, 20-26 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6, 10-14, 16, 20-24, 26, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi (U.S. 20040012807), and in view of Suzuki (U.S. 6549947).

Regarding claim 11, Konishi discloses a system for interfacing with a printer driver (fig.

1), comprising:

- (1) means for receiving (communication interface, fig. 1 and fig. 3) data transmitted from the printer driver;
- (2) means for receiving (communication interface, fig. 1 and fig. 3) an acknowledgment request (reply issuance request from the printer driver, fig. 1 and fig. 14) from the printer driver, wherein the printer driver does not send further data to print until receiving an acknowledgment reply indicating that the transmitted data passed an initial check (the printer driver further transmits the print data to the printer if the returned request is positive, p. 5, par. 89-94);
- (3) means for transmitting (communication network, fig. 1) an acknowledgment reply (reply response, fig. 3) to the printer driver in response to the acknowledgment request before completing the initial check (check execution before returning reply information to printer driver, p. 2, par. 14-17) of the sent data to cause the printer driver to send further data;

However, Konishi does not explicitly disclose a system interfacing with a printer driver comprising means for resynchronizing data processing operations in response to detecting an error in the received data; and means for rasterizing and outputting the data.

Suzuki, in the same field of endeavor for system interfacing with a printer driver, teaches a means for resynchronizing data processing operations in response to detecting an error in the received data (retransmitting the print data if the error occurred, fig. 12, abstract and col. 6, lines 32-48 and col. 10, lines 1-23); and means for rasterizing (bit image, col. 5, lines 40-50) and outputting (printer, col. 5, lines 40-50) the data.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Konishi as per teachings of Suzuki because of a following reason: (1) to retransmit the print data to the printer in an event of error occurs.

Therefore, it would have been obvious to combine Konishi with Suzuki to obtain the invention as specified in claim 11.

Regarding claim 12, Suzuki further discloses the system of claim 11, wherein the received data comprises a first received data set, further comprising means for receiving a second data set (input jobs, fig. 4-5) from the printer driver after transmitting the acknowledgment reply and before completing the rasterization of the first data set.

Regarding claim 13, Suzuki further discloses the system of claim 12, wherein each received data set comprises a page of data (abstract and col. 9, lines 25-67), a portion of a page or commands to output.

Regarding claim 14, Suzuki further discloses the system of claim 12, further comprising: means for buffering (spooler, fig. 1) the second data set while the first data set is being rasterized; and means for rasterizing the buffered second data set after completing the rasterization of the first data set.

Regarding claim 16, Suzuki further discloses the system of claim 11, wherein the initial check is to verify that the data was received, accepted and syntax checked (fig. 16).

Regarding claim 20, Suzuki further discloses the system of claim 11, wherein the means for transmitting the acknowledgment reply to the printer driver in response to the acknowledgment request before completing the initial check of the sent data comprises an asynchronous processing mode (col. 6, lines 32-67), and wherein the means for resynchronizing (col. 10, lines 1-45) data processing operations in response to detecting the error comprises beginning a synchronous processing mode wherein the acknowledgment reply is sent to the printer driver in response to the acknowledgment request after completing the initial check of the resent data.

Regarding claims 1-4, 6, 10: Claims 1-4, 6, 10 are the method claims corresponding to the apparatus claims 11-14, 16, 20 (respectively). The method claims are included by the operation of the apparatus claims. Please see claims rejection basis/rationale as described in claims 11-14, 16, 20 above.

Art Unit: 2624

Regarding claims 21-24, 26, 30 correspond to claims 11-14, 16, 20 except computer readable memory medium for storing program is claimed rather than printing system or data output apparatus. All computers have some type of computer readable memory medium for storing computer programs, hence claims 21-24, 26, 30 would be rejected using the same rationale as in claims 11-14, 16, 20.

3. Claims 5, 15, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki and Konishi as applied to claims 1, 11, and/or 21 above, and further in view of Parker et al (U.S. 6441919).

Regarding claims 5, 15, and 25, the combinations of Suzuki and Konishi do not explicitly teach two rasterizers to rasterize in parallel the two data sets.

Parker, in the same field of endeavor for printing, teaches two rasterizers to rasterize in parallel the two data sets (parallel rasterizers, fig. 1, col. 5, lines 1-20).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combinations of Suzuki and Konishi as per teachings of Parker because of a following reason: (1) to increase printing speed by processing two sets of print data using parallel rasterizers.

Therefore, it would have been obvious to combine Suzuki and Konishi with Parker to obtain the invention as specified in claims 5, 15, and 25.

***Allowable Subject Matter***

4. Claims 7, 17, 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

For example, the limitations as recited in claim 7, wherein resynchronizing data preprocessing operations in response to detecting the error further comprises: detecting an error while processing the received data; transmitting a negative acknowledgment indicating an error that causes the printer driver to resend previously transmitted data that did not output successfully; and wherein after transmitting the negative acknowledgment, performing: (i) receiving data and one acknowledgment request; (ii) performing the initial check of the received data; (iii) determining whether the received data is resent data; and (iv) if the received data is resent data, then transmitting an acknowledgment reply to the printer driver in response to the acknowledgment request after completing the initial check of the resent data.

***Conclusion***

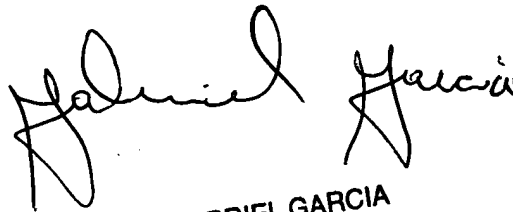
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham



GABRIEL GARCIA  
PRIMARY EXAMINER